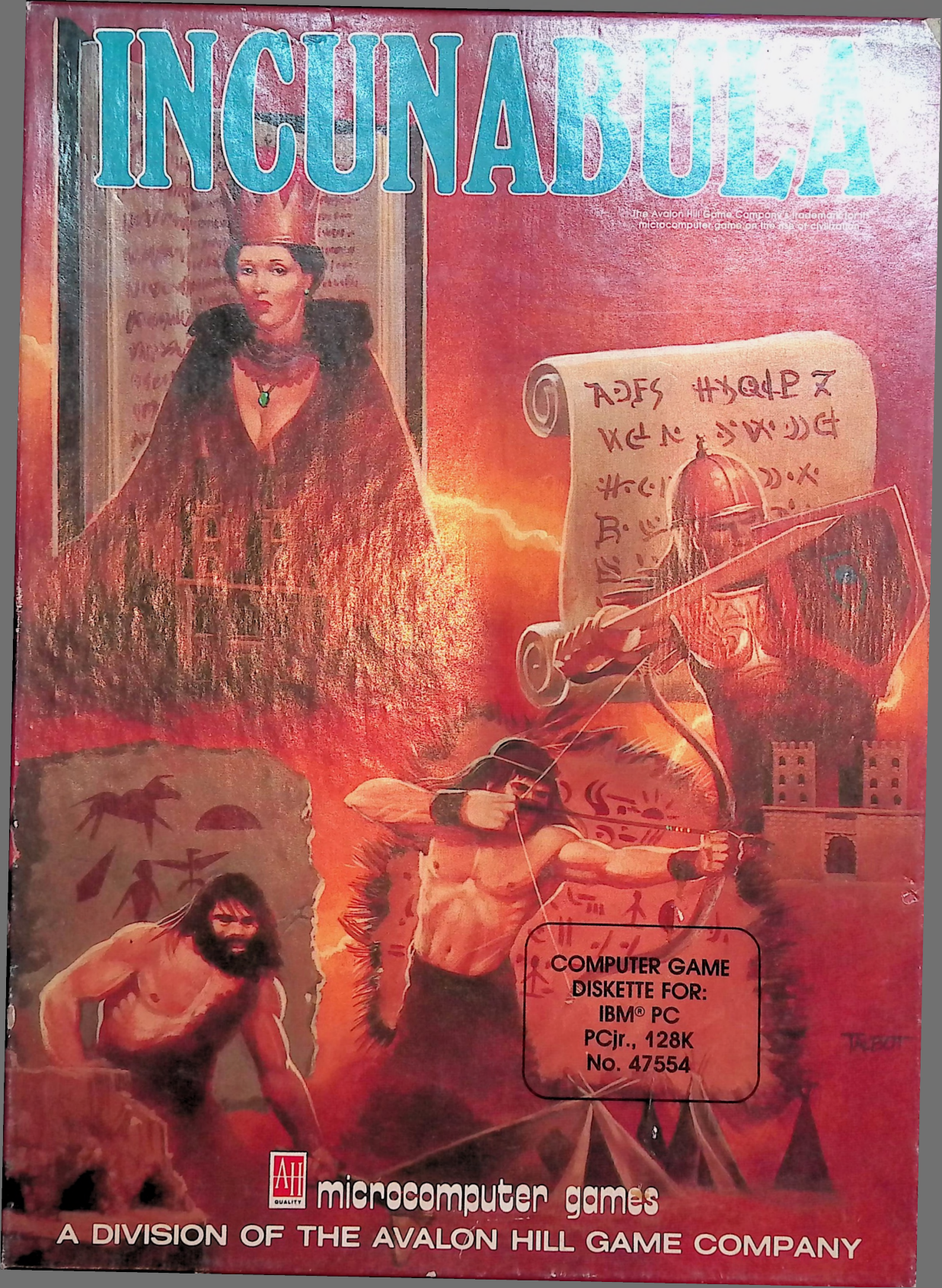


INCUNABULA

The Avalon Hill Game Company's trademark for its microcomputer game on the rise of civilization.



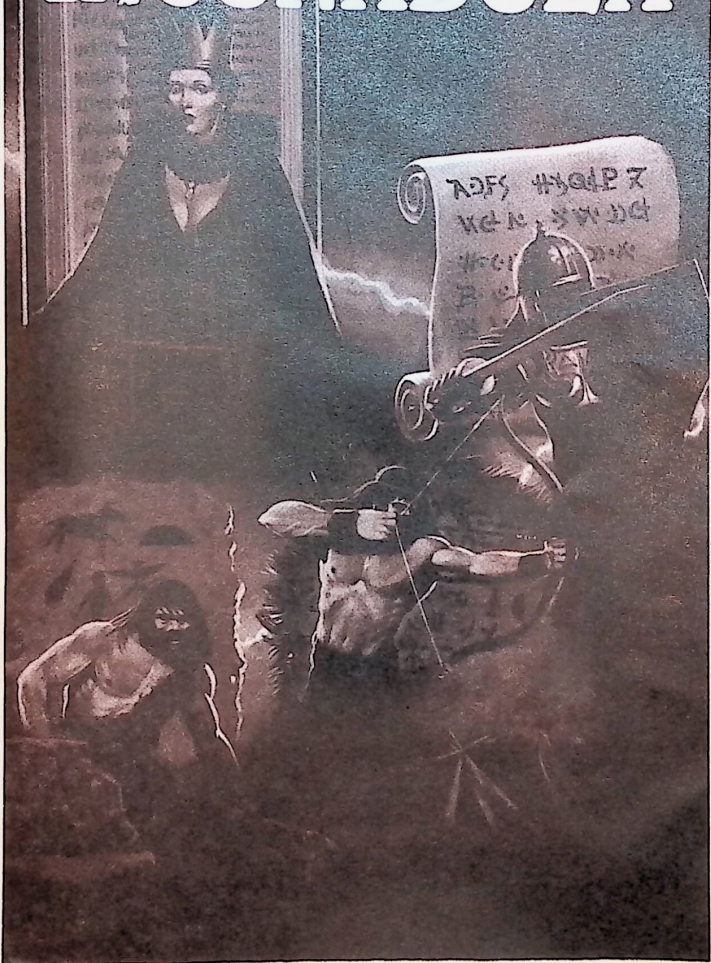
COMPUTER GAME
DISKETTE FOR:
IBM® PC
PCjr., 128K
No. 47554



microcomputer games

A DIVISION OF THE AVALON HILL GAME COMPANY

INCUNABULA





INCUNABULA®

The Ascent of Man

INCUNABULA IS THE AVALON HILL GAME COMPANY'S TRADEMARK
FOR ITS MICROCOMPUTER GAME ON THE RISE OF CIVILIZATION

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1.0 INTRODUCTION

Incunabula portrays the struggles of early civilization on the mythical continent of Zaumulor. You are the head of a clan occupying a small area of the map. As your people prosper, they will build cities, produce trade goods, engage in war and establish alliances. But only under your leadership can your tribe grow from a clan to an empire.

Your goal is to establish a basis of law (BOL) for your society, and to reach that BOL by obtaining arcana like agriculture, music, theology and writing. Arcana is purchased with the trade goods your people produce. (If you are the head of a Khanate, you cannot acquire arcana. You need only sufficient trade goods to win).

Each game-turn is divided into phases, including population growth, migration, battle, production of trade goods, trade and arcana acquisition. Some phases are carried out automatically by the computer, such as production of trade goods, while others involve player participation. *Some phases will appear only when certain conditions are met, and the Migration and Battle phases are performed twice each game-turn.*

After all the players have given movement orders, the computer executes them in a random order. If opposing tribes move into the same hex, war breaks out. If enough people gather together, a city is built. Players with port cities may build fleets to transport their population across the seas. But if too many gather together, disaster might strike. Overpopulation brings tragic results.

Each turn, your population grows and produces trade goods based upon the BOL you have chosen, the terrain and the number of cities you have built. When your tribe has enough goods, you may trade with other tribes.

As time passes, your tribe grows from a tribe to a clan, a nation, and finally to an empire. Disasters may reduce your population, enemies may sack your cities, and barbarous Khanates may demand tribute from you. It is your wisdom which will lead your people to their destiny and determine the fate of civilization.

In case you're wondering, these boxes will explain some rules in more detail. It's not necessary to read them before beginning the game, but they will help you play better.

2.0 SET UP

This game requires 128K of memory. To begin play, boot up the computer with your DOS disk. Insert the game disk and type INCINT [ENTER].

The following screens will appear after the title screen:

Scenario Screen: The *Imperium* and *Traders* scenarios are simplified versions of the *Incunabula* scenario. *Traders* contains the Trade phase only. *Imperium* is the same as the *Incunabula* scenario except that it omits the Trade Phase. See Section 3.0 for more information.

Number of Players: Specify the total number of human and computer players, and name the tribes controlled by the human players. Up to six people can play any scenario, with the computer filling the remaining positions so that there will be seven players in the *Incunabula* scenario.

(At this point, the *Traders* scenario begins)

Assigning Humors and BOLS: Humors are traits that dictate the actions of each computer tribe. They can be assigned randomly or at your discretion. If you assign them, the computer will present a list of humors and BOLs to choose from. Human players are not assigned humors; they bring their own to the game. See Section 2.B for more information.

Tributes, Alliances & Disasters: These are self-explanatory. After selecting these, the game will begin.

3.0 SHORTER SCENARIOS

Two scenarios shorter than the *Incunabula* scenario are provided. These are useful both as aids in learning parts of the game and when less play time is available. The rules in both scenarios are identical to the corresponding phases of *Incunabula*.

Imperium: Players chose a BOL and build cities and fleets. They do not trade. Your only goal is to defeat all opposing players in battle.

Traders: This scenario allows you to sharpen your bargaining skills. There is no map movement or battles. The object is to accumulate 1,000 trade points through shrewd deals with the other players. See Section 4.5 Trade for more information.

4.0 SEQUENCE OF PLAY

This is the complete sequence of play. After some phases, the computer will wait for the player to strike a key before continuing. The Tribute and Alliance phases will not appear until certain requirements are met.

1. Population growth (occurs every other turn)
2. Migration (performed twice each turn)
3. Battle (performed twice each turn)
4. Production of trade goods
5. Trade
6. Arcana acquisition
7. Disasters
8. Tribute
9. Alliances
10. Population adjustment
11. Status

2.A SAVING AND RECALLING GAMES

You may save the game at the end of each round. Be sure to have a formatted disk. The program will ask you for the drive where the save disk is located (usually it's B). Type the drive letter. It will then ask you for a number by which to identify the saved game (0-9).

To restore a game, choose 4 from the initial scenario screen. The program will ask you to enter the letter of the drive containing the save game disk. The program will then list the game numbers available, and after you choose, will show you the game's status.

2.B HUMORS AND BASIS OF LAWS

Four personalities are provided for computer players, named for the medieval concept of humors: choleric, phlegmatic, melancholic, and sanguine. Since any BOL can be combined with any humor, 16 combinations are possible.

Choleric players are winners. They want to be first and try to achieve this by considering alliances with other players. They will retaliate only when it helps their position. Building a strong defensive position is more important than attacking others. A choleric Khan, however, must still attack.

Phlegmatic players seek to be placers. They want to finish in one of the top three positions. To do this they readily make alliances. They may continue an alliance even if its partner is stronger. Phlegmatics are more likely to attack weaker players to boost their position. Retaliation is more likely than with choleric players.

Melancholic players are balancers. They are less concerned with winning than with equalizing play. They will ally with almost any player except Khans and will break alliances only if the partner becomes too strong. Melancholics are more likely than other humors to retaliate against players for perceived aggression. They are also more likely to attack cities.

Sanguine players are unpredictable. Their goal is to keep the game interesting. This is reflected by a tendency towards balancing, but with more random reactions. Their attitudes towards alliances are similar to melancholics, but less predictable.

At some point in the game, each player must choose a basis of law (BOL). Four are available, each with characteristic advantages and disadvantages. Once chosen, the BOL cannot be changed.

Theocracy requires the development of theology and philosophy (see Appendix A, Table A-1). Theocracies have a high degree of stability and battle strength due to their belief in the divinity of their rulers. The presence of a priesthood and their sacrifices increases gpu consumption and results in less efficient trade production and below average population growth.

The priesthood uses grain even in poor years, so famine strikes harder. Priests also study medicine so plagues are less severe. The presence of a divine ruler decreases the chance of civil war, but heresies do occur, resulting in frequent insurrection. Earthquakes are accepted as the lord's works.

Oligarchy requires theology and law. This BOL is the most unstable and is most hurt by civil war. However, battle strength is still high, since the ruling families take an active part in campaigns. The presence of these non-productive families drains gpu but their effect on trade is good. Population increase is also above average.

4.1 POPULATION GROWTH

Time moves quickly in this game. The seasons pass, and with it comes the growing and accumulation of crops and natural resources. These are expressed in grain or metal production units [abbreviated gpus and mpus respectively]. This is the currency of the game, used to feed your people.

Every other turn, the population will also increase, and they must be supported. Enough people in one space, and a city is built. Too many, and death appears. The choice is simple: migrate or die. It is the same choice that was faced by European and Asiatic tribes over a thousand years ago.

Every other turn, each population token may generate grain or metal production units. Tokens on the coast or in plains produce an average of 25 grain production units (gpus) per round. Tokens in the mountains produce metal production units (mpus). Tokens in cities and in the desert produce nothing.

Each token may also produce 1 or 2 additional tokens per hex. Population growth is dependent on the terrain and BOL. Plains and coastal areas support the most tokens; mountains and deserts support fewer tokens.

Gpus are then distributed to feed each player's population. Each token, no matter where it is, consumes 6 gpus per round. Each city requires 40 gpus per round. If the supply of gpus are exhausted, mpus and trade items are automatically converted to gpus to feed the rest.

4.2 MIGRATION

A.k.a: movement. Units can move only one hex per turn (exception: fleet movement). Stacking is unlimited, but keep in mind that a hex can support only so many people.

The Migration and Battle phases are performed twice before going on to the production of trade goods. The player may examine any hex on the map by moving the cursor over it. To give a movement order, place the cursor over that unit and press the INS button. It will ask how many units you wish to move, and in what direction. You may choose to move any number of tokens in that stack one hex in any direction.

When all players have issued their orders, the computer executes them in a random order. If tokens move into a hex occupied by the tokens of a non-allied player, those tokens are pinned and battle may occur. Players who paid partial tribute to a Khan during the Tribute phase have less of a chance of being attacked by that Khan. If full tribute is paid, then the Khan may not attack. *Note: moving into an Khanates' hex may incur an attack even if you have paid tribute to him. The computer will announce this fact immediately before the Battle phase with the words: "[Your nation's] bribe to (Khanate) succeeds/fails."*

If enough tokens are in the same hex, a minor city will be built automatically during the Population Adjustment phase. The number of tokens depends upon the terrain: six tokens in a plains hex is the minimum for a minor city; twelve for a major. These tokens are then "lost" and will not reappear unless the city is attacked. Additional tokens moved into a city will defend it against attackers.

It's possible to move more than nine units into a hex. This will be indicated on the hex pattern display by the player's initial and a plus sign. Only nine units may move out of any one hex per Migration phase.

Players with a port city can build fleets during the Migration phase with the "F" command. Fleets may transport tokens from one coastal hex to another. They may be moved any number of hexes but each move exposes the fleet to danger. See Section 4.2.B Fleet Movement for more information.

The following commands may be used during the Migration phase:

G Global map: shows the entire map, identifying the hex the cursor is

A rigid social system increases the effects of plague (less help is available to the lower classes). Civil wars and insurrections are more severe due to factional rivalries. Better organization decreases the effects of earthquakes.

Utopia requires philosophy and law. There is no caste system to drain production, and gpu and trade production are high. The efficiency of citizen-armies is low. Population increase is better than average.

Shared provisions decrease the effects of famine, and plague is less virulent. Civil wars are slightly more likely, and insurrections less frequent.

Khanate has no arcana requirements. Its battle strength is the highest of any BOL, and the Khanate's austerity results in a more efficient use of gpus. Population growth is slightly below average. Famine and plague strike harder at the nomads. Civil war is more likely. Earthquakes have less of an effect due to the Khanates' minimal use of buildings and less concentrated population.

2.C CHANGING PLAYERS

Playing the *Incunabula* scenario can last several hours, so there is always the problem of replacing players who must leave early, or of allowing new players in during the middle of the game. At the end of each turn, it is possible to turn over a player's society to computer control, and vice versa. Simply follow the prompts where shown.

4.2.A HIDDEN VALUES AND SIMULTANEOUS MOVEMENT

During the Migration phase you can ask to see a population distribution. This is a global map showing the majority player in each hex. You also see the other players on tactical maps. You can move the cursor anywhere on the map, but token values of other players will only be shown when your tokens are adjacent to theirs.

Moves are processed in random order. Once a token moves into a hex, all non-allied tokens in that hex are pinned; that is, they cannot move this phase. This can be a useful tactic to slow the attack of a larger force.

Because moves are simultaneous it will sometimes be to your advantage to try to keep enemy tokens in the same hex you occupy. You may do this because you want the rest of your tokens in that hex to escape, or because you want to bring more troops into that hex to attack the other player. To attempt a pin, enter "P" in response to the direction prompt of the movement command. Effectively this orders one of your players to make a move of zero distance. If this order is executed before the other player's, his movement orders are cancelled, but your other tokens in that hex can still move.

While Khans are prohibited from attacking players who pay full tribute, if a player who paid the tribute moves into the Khan's hex, a battle would still occur.

4.2.B FLEET MOVEMENT

Fleets transport tokens from one coastal hex to another. They may only be built in port cities by issuing the "F" command during the Migration phase. Fleets may try to move any number of hexes but each movement risks the fleet. The chance of destruction along a coast is about 5%. The chance of loss on the open sea is initially about 10% but goes down to about 3% if you acquire the navigation arcana.

Up to 6 tokens may be carried by your fleet at one time. When orders are given to pick up tokens, it goes into effect at the end of the Migration

in, plus the terrain and location of that hex.

H Help: lists the commands available during the Migration phase.

INS Move from hex: allows you to give movement orders to your people. Use the numeric keypad to give the direction, then the number of units going in that direction. Each token may move one hex per Migration phase. An order given cannot be rescinded.

INS/P Pin unit: will order any number of tokens in that hex to "pin" any non-allied tokens in that same hex, preventing them from fulfilling their orders. To enter this order, simply press "P" for the direction.

(numeric keypad) Cursor/token movement: done using the numeric keypad on the right-hand side of the keyboard. The "8" and "2" keys move the cursor up and down two hexes. The remaining six keys are used for horizontal and diagonal movement.

PC-jr. users must use the following pattern to move their units:

1: sw; 2: s; 3: se; 4: w; 5: hold; 6: e; 7: nw; 8: n; 9: ne

P Population distribution: shows each player's tokens and cities on the global map. Minor cities are drawn as a small house, while major cities are represented by a starburst.

F Construct fleet: one fleet per turn may be built in port cities. Fleets are used to transport tokens between coastal hexes and cost 40 gpus per round to maintain. Use the numeric keypad to issue movement orders.

T Tactical map: shows a closeup of one section of the map. Its location on the strategic map is shown in the box in the lower right-hand corner of the screen. Moving the cursor with the numeric keypad will shift the map.

Q Quit: ends your move. When the last player has moved, the screen shifts to the Global Map showing the entire population of Zaumulor. Movement orders are then carried out, with the map showing both prior positions and the new location of the peoples.

4.3 BATTLE

The common people suffer when the powerful disagree.

— *Phaedrus*, c. 40

Battles occur whenever two or more non-allied peoples occupy the same hex at the end of the Migration phase. At least one round of combat ensues, with the more numerous army having the advantage. A player's BOL affects an army's value, as can mpu. More than one round of combat may occur, with Khanates continuing to fight until they or their opponents are eliminated.

Battles are shown on the global map and casualties are listed at the bottom of the map. Players whose tokens have suffered casualties are in the bottom left column, along with the initial of their attacker(s) and the number of casualties they lost.

If more than six enemy tokens move into an unopposed city, that city is replaced by six of its owner's tokens and battle occurs. If the attacker wins, the city is sacked and the attacker receives trade items from the loser.

When Khanates are victorious in battle, they take gpus from that player. The amount is random, averaging 20 gpus per token. Khan versus Khan battles also result in gpu losses, but less than against other BOLs.

4.4 PRODUCTION OF TRADE GOODS

Victory on the battlefield is important, but secondary to how a player manages the trade goods

phase. Until that time, you must also make arrangements to see that your people are in that hex when the ships arrive. Use the **INS** key and the numeric keypad to move your fleet. Orders to pick up and drop off people are given by pressing the **INS** and **DEL** keys. The program will only permit you to move through coastal or sea hexes (note: rivers are partially navigable).

First you must issue orders to your fleet to move to a specific hex. To give orders to pick up tokens in that hex press **INS**. You'll be prompted for the number of tokens to load on the ship. Then continue plotting the fleet's movement until the first destination is reached. To drop off tokens, press **DEL** and then indicate the number of tokens to leave there. You can continue to plot fleet moves, loading or disembarking more tokens. Press the Space Bar to indicate the end of a fleet's orders.



4.3.A BATTLE ALGORITHMS

Battle resolution is automatic. For each round of battle, strengths for each side are calculated. The chance that Player A will defeat Player B is computed in the formula $A/(A+B)$. For example, if the calculated battle strength of A is 3 and that for B is 5, then there are 3 chances in 8, or roughly 37%, that A will win. This calculation prevents any automatic victories, yet ensures that the stronger force will usually prevail. Any loss is immediately reflected in subsequent casualty calculations.

Battle strength is found by adjusting the number of tokens to the effect of the BOL. For example, khans have a +30% adjustment, utopians a -20% adjustment. Additional small percentages are added for each class progression. Finally, if a player has mpus, this add an additional 10% to its strength. (One mpu is used for each token).

Attacks against cities are handled in two ways, depending on the number of defending tokens present. When no defending tokens are present, at least seven attackers must move into that city hex. For example, if five attacking tokens are moved into the hex, no battle will take place until an additional two tokens arrive. Once seven attacking tokens are present, the city is replaced by six tokens and a battle ensues as usual.

When defending tokens are present, a battle is fought when any number of enemy tokens move into the city hex. The defender's base strength will

his people produce. During the first two turns, trade good production is sacrificed in favor of agriculture and mining. When enough food and metal is being produced, the players will see an increase in the amount of goods. With these goods, players can build up their wealth through shrewd trading, and improve the lives of the people by purchasing arcana.

All people produce trade items based on terrain and BOL. Coastal and plains areas produce grain, and mountains yield metals. An average of 1 out of 7 occupied hexes will produce trade items each round. Any two items with the same trade value are interchangeable as trade items, regardless of their origin.

For those with color monitors, the goods tinted green are produced by people in clear areas, the red by people in mountains, and the yellow in cities.

Grain and metal production units (gpus and mpus) are produced in coastal, plain and mountain hexes. Grain units feed people and metal units increase their battle strength. If holdings exceed 500 gpus, they are randomly converted to trade items. The exchange rate is 50 gpus per trade item for non-Khans, 100 gpus per trade item for Khans.

Khanates produce only a limited amount of gpus or mpus. When they defeat enemy tokens, they take gpus from the loser. Khans also exact tribute from other players.

4.5 TRADE

Buy cheap, sell dear.

— Thomas Lodge, 1595

In the Trade phase, players with sufficient trade goods can offer them for trade. There are 21 commodities, worth from 2 to 9 points each and lettered from A to U.

The trade sequence is as follows: one player (computer or human) will offer a batch of goods. Each player in turn will bid for it with their trade goods. When all the players have made their bids, the first player will see the bids, and decide whose offer he will accept, if anyone's.

A human player will know when to sell his trade goods by the screen's color. If it is his turn to make an offer, the list of goods will be in a black block. If he is to make a bid, there will be no black block.

All bids are optional. Each computer-controlled player acts independently of the others. They know nothing about other players' trade holdings. The human players, however, are free to watch all the screens during this phase.

After each round of trading, the human and computer players decide if they want another round of trading. It is suggested that at least one player express interest in trading in order to continue this phase. Any number of trading rounds may be played.

When all trading is completed, those players who have chosen a BOL and have at least 100 points in trade goods will have the chance to purchase arcana. The value of trade items is calculated as the square of the number of items times the item's base value.

The following table shows some examples:

base value	number held	holding value
1	2	$4 \times 1 = 4$
1	3	$9 \times 1 = 9$
3	2	$4 \times 3 = 12$
3	4	$16 \times 3 = 48$
9	2	$4 \times 9 = 36$
9	4	$16 \times 9 = 144$

have an additional six tokens added to the number of defending tokens. The city is not, however, reduced to six tokens until the extra defenders are eliminated.

When a city's tokens are reduced to zero, the city is sacked and trade items are looted. The number of trade items is based on the ratio of cities to trade items sold.



4.5.A TRADE ALGORITHMS

Computer players know nothing of opposing players' goods or holdings. They do, however, remember other players' responses from previous moves. It's thus to your advantage to develop good relations with other players. This might include occasional trades in which you give more than you get. Also, rounds in which you refuse to bid are not appreciated by the computer players.

No more than six of any item can be kept, due to spoilage and lack of storage capacity.

4.6 ARCANA ACQUISITION

All wish to know, but none want to pay the price.

— Juvenal: Satires, VII, 118

Arcana represent the technologies, knowledge, and skills that allow a civilization to develop from a tribe to an empire. They are purchased using trade goods. There are two types of arcana: major and minor. The major arcana are the three BOLs, plus law, philosophy and theology; the rest are minor arcana. Most arcana have prerequisite arcana that must be purchased first (see Appendix A, table A-1). Each player may purchase a maximum of 12 arcana.

To win, you will need to fulfill your Basis of Law's arcana requirements. Each BOL requires eight to ten specific arcana. Arcana not required to achieve your BOL are useful in averting disasters or aiding sea travel.

Exception: Khanates have no arcana requirements. To win, they must acquire 1,800 trade points.

Each human player with at least 100 points in trade goods is shown the arcana acquisition screen. Arcana already purchased is highlighted in green. Arcana required to achieve the chosen BOL are shown in red (or a light color on monochrome screens). If you wish to purchase, enter the code letter for the arcana (A-N). You will get that arcana if you have the points and the prerequisites. If you try to buy a high-level arcana before you have the prerequisites, a message will appear listing one of the prerequisite arcana.

4.7 DISASTERS

Calamity is virtue's opportunity.

— Seneca: *De providentia*, c. 64

During the Disaster phase, there is a chance that "acts of God" will happen. The frequency of these disasters is determined by the setting at the start of the game. How each Basis of Law affects disasters is described in Section 2.B: Humors and BOLs. The following arcana alleviate disasters:

Pottery allows people to store food in good years and lessen the effects of famine.

Engineering teaches better construction methods and results in greater resistance of cities to earthquakes.

Medicine reduces the effects of the plague.

Beyond these slight adjustments, all you can do is pray to your god that the disasters level your enemies and assist your friends. The five apparitions of destruction are:

Famine starts in a plains or coastal hex and spreads from there.

Plague breaks out in an occupied hex and spreads from there. It only infects populated hexes; thus, heavy concentrations of tokens are more likely to spread the disease.

Civil War is instigated automatically by a non-allied neighbor. The result may be the defection of one player's army to the other side.

Insurrection occurs in the cities of one player. Revolts are always put down, but it may be costly. An insurrection that hits a player with no cities will result in no losses.

Earthquakes always have their epicenter in the mountains, but may also affect people in other terrain.

4.8 TRIBUTE

This section applies to Khanates in particular. It is easily their major weapon in their search for victory, since they have no arcana requirements to fulfill.

Tribute to whom tribute is due.

— Romans XIII, 7, c. 55

Each Khanate can demand tribute from all non-Khanate players by giving the computer two numbers in response to its prompts in this phase. The first is the minimum acceptable amount in gpus. If this amount is paid, the Khanate may not attack that player. The second number is the amount of tribute to be demanded. These numbers need not be the same.

For example, the Khanate of Byztium wants at least 100 gpus, but demands 200 from the Theocrat of Zagros. If Zagros pays 100 or more gpus, the Khanate cannot attack them on the following turn. If that player pays less, then there is a chance of attack based upon the ratio of payment to minimum tribute.

After the Khans make their demands, each player chooses how much tribute to pay, if any. Finally, each Khan is shown the results of this round's bullying.

4.9 ALLIANCES

Close alliances with despots are never safe for free states.

— Demosthenes: *Second Philippic*, c. 345 B.C.

Khanates cannot form alliances; all others players can form one alliance. Alliances are possible between human and computer players.

The Alliance phase consists of 4 parts: proposal, acceptance, summary and termination:

1. All eligible players can propose an alliance.
2. In the acceptance phase, players choose to accept or reject those proposals.
3. The third phase shows an updated list of alliances.
4. In the last phase, players are given a chance to break alliances.

4.10 POPULATION ADJUSTMENT

Minor cities are built in any coastal or plains hex occupied by six player's tokens. Twelve tokens are required to build a minor city in the desert, eight to build one in the mountains. The tokens are then replaced with the house symbol. If a city already stands there, a major city will be built (shown on the map as a starburst). Major cities produce more trade goods than minor cities.

Note that cities cannot be built within two hexes of other cities. If you try, you will lose the extra tokens in this phase.

All cities requires 40 gpus per turn to support. If insufficient gpus are present, unsupplied cities are replaced by six tokens.

Each terrain type has a limit to the number of tokens it can support. Any tokens in excess of terrain limits are eliminated.

4.11 STATUS

This phase shows a summary of current holdings, rankings and whether any players have progressed to a higher class or won the game.

Society advances through four classes: tribe, clan, nation and empire. Entry requirements for each class are shown in Appendix A, Table A-2.

To win, a Khanate must become an empire by acquiring a total worth of 1,800 trade points. Players with other BOL's must 1): fulfill the requirements of an empire, 2): purchase their chosen BOL, and 3) have the total value shown in Appendix A, table A-2.

GLOSSARY

Arcana — the systems of knowledge which forms the basis for civilization. Purchased with trade goods.

BOL (basis of law) — the set of rules and technologies from which a nation develops. Four types of BOL form two groups: the triad and the Khanates. The triad is composed of Theocracy, Oligarchy, and Utopia. They share similar goals and the means for achieving them. The Khanates are predatory and parasitic. They produce little and rely on force to achieve their goals. (A popular choice).

GPU (grain production unit) — produced by tokens in coastal and plains areas. Used to feed armies and supply cities. Can also be used for tribute. Individual tokens require 6 gpus per turn to support; cities and ships require 40.

Hex — a hexagon-shaped area imposed on a map.

MPU (metal production unit) — produced by tokens in mountains. Aides in battle.

Token — one population unit. Tokens produce goods and engage in combat.

Triad — the three non-Khanate BOLs.

APPENDIX A: ARCANA REQUIREMENTS AND OTHER TABLES

Table A-1: Arcana Requirements

Minor Arcana	Prerequisite Arcana	Trade Cost	Advantage Conferred
Agriculture		100	
Architecture	metal working	100	
	mathematics		
Drama	writing	100	
Engineering	mathematics	100	cities resist earthquakes
Mathematics	numerology	100	
	writing		
Medicine	numerology	100	resistance to plague
Metal Working		100	increased mpu production
Music		100	
Navigation	mathematics	100	extended sea voyages beyond sight of land
Numerology		100	
Pottery	agriculture	100	resistant to famine
Writing	agriculture	100	
Major Arcana			
Law	architecture	250	
	mathematics		
Philosophy	mathematics	250	
	music		
Theology	agriculture	250	
	drama		
Theocracy	theology	350	
	philosophy		
Oligarchy	theology	350	
	law		
Utopia	philosophy	350	
	law		

Table A-2: Class Progressions

Position	# Cities Needed	Trade Points
tribe		
clan	2	450
nation	4	900
empire	5	1800

Trade points is composed of the sum of

arcana values + [gpu/10] + [mpu/5] + unused trade values

Note: Khans cannot acquire arcana. They need only acquire the trade points of an empire. Khans need no cities.

IF YOU CANNOT LOAD THE PROGRAM

1. Check your equipment carefully to be sure that all cables and connections are correct.
2. Re-read the section in your computer's manual that tells you how to load software. Try to load software again.
3. If you can adjust the volume on your recorder, try different settings, both higher and lower.
4. If possible, load another program from a tape or disk you know works on your computer. This will prove that your equipment works. Try once more to load your game.
5. The normal reason software will not load is tape recorder or disk drive head misalignment. Your computer may be able to save and load programs on its own recorder, but be unable to read software made on a different recorder for this reason. Be sure your recorder heads are correctly aligned. Your local computer store or dealer can help you with this.
6. If the program still cannot be loaded, send the software, with a complete description of the problem (what type of computer you have, what the computer says, if anything, when you try to load the software or play the game, and what you did to try to get it to load.) to:

The Avalon Hill Game Company
Microcomputer Games
4517 Harford Road
Baltimore, Maryland 21214

Defective software will be replaced.

YOU NAME IT, WE'VE GOT A GAME ON IT . . .

The Avalon Hill Game Company is the world's largest publisher of a great variety of strategy board games of skill. We manufacture over 100 games; including wargames, sports strategy and statistical replay games, power politics games, adventure and role-playing games, and games on fantasy and science fiction. For complete information with pretty pictures, write the factory and ask for a *Complete Game Catalog*. Consult current parts price list for price of catalog.

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Consumer Relations
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QUESTIONS ON PLAY

The clarity of these rules has been verified by *Software Testers of Universal Microcomputer Programmers (STUMP)* and deemed "complete" in all facets of instruction. Please re-read them in areas that seem unclear at first reading. Questions on play can be answered by the factory *only* upon receipt of a self-addressed envelope bearing first-class postage.

UNAUTHORIZED REPRODUCTION OF THIS GAME IN ANY FORM IS SPECIFICALLY PROHIBITED. WE CONSIDER ANY VIOLATION OF THIS REQUEST DETRIMENTAL TO OUR LEGAL RIGHT TO EXIST IN A COMPETITIVE BUSINESS ENVIRONMENT.

Summary of Commands

- G** **Global map:** shows the entire map, identifying the hex the cursor is in, plus the terrain and location of that hex.
- H** **Help:** lists the commands available during the Migration phase.
- INS** **Move from hex:** allows you to give movement orders to your people. Use the numeric keypad to give the direction, then the number of units going in that direction. Each token may move one hex per Migration phase. An order given cannot be rescinded.
- INS/P** **Pin unit:** will order any number of tokens in that hex to "pin" any non-allied tokens in that same hex, preventing them from fulfilling their orders. To enter this order, simply press "P" for the direction.
- (numeric keypad)** **Cursor/token movement:** done using the numeric keypad on the right-hand side of the keyboard. The "8" and "2" keys move the cursor up and down two hexes. The remaining six keys are used for horizontal and diagonal movement.
- PC-jr. users must use the following pattern to move their units:
1: sw; 2: s; 3: se; 4: w; 5: hold; 6: e; 7: nw; 8: n; 9: ne
- P** **Population distribution:** shows each player's tokens and cities on the global map. Minor cities are drawn as a small house, while major cities are represented by a starburst.
- F** **Construct fleet:** one fleet per turn may be built in port cities. Fleets are used to transport tokens between coastal hexes and cost 40 gpus per round to maintain. Use the numeric keypad to issue movement orders.
- T** **Tactical map:** shows a closeup of one section of the map. Its location on the strategic map is shown in the box in the lower right-hand corner of the screen. Moving the cursor with the numeric keypad will shift the map.
- Q** **Quit:** ends your move. When the last player has moved, the screen shifts to the Global Map showing the entire population of Zaumulor. Movement orders are then carried out, with the map showing both prior positions and the new location of the peoples.



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DO A FRIEND A FAVOR.

If you know someone who has the basic brain power to comprehend Avalon Hill games then get them to send us this postcard.

In turn you'll be doing yourself a favor... you might pick up a new opponent in your neighborhood. (If you wish, fill in their name and address, yourself, and send it in.)

If you would like a colorful brochure describing the wonderful world of Avalon Hill games enclose this card in an envelope with 1.00 for each catalog ordered.

NAME OF BRIGHT FRIEND _____

(type or print)

STREET ADDRESS _____

CITY _____

STATE _____

ZIP _____

Dear Avalon Hill,

I'm sending you this REG CARD from your _____ game. In return I automatically get on your mailing list which means I'll get new product info before the general public does.

1. Game is:

☐ Too Simple ☐ Just Right ☐ Too Complicated

2. I enjoyed playing this game

☐ a) ☐ b) ☐ c) ☐ d) ☐ e)

(a means you enjoyed it very much; e means not at all)

3. I heard about the game through: (check all that apply)

☐ Avalon Hill Literature ☐ Magazine Ad ☐ Newspaper Ad

☐ A friend ☐ Store: _____

☐ Gift ☐ Other: _____

4. Point of purchase of this game: (check one only)

☐ Direct from Avalon Hill ☐ Computer Store

☐ Mail Order other than AH ☐ Other: _____

5. Please list which computer/game systems you own:

6. My computer has the following: (check all that apply)

☐ 16K ☐ 32K ☐ 48K ☐ _____ K

☐ Printer ☐ Disk Drive ☐ Other: _____

7. I would like to see more computer games: (check all that apply)

☐ Historical-Naval ☐ Historical-Air ☐ Historical-Land

☐ Fantasy ☐ Science Fiction ☐ Sports

☐ Arcade ☐ Other: _____

8. My favorite computer magazines are:

9. Any comments?

Name _____ Age _____

Street Address _____

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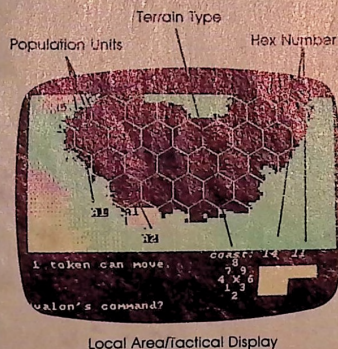
INCUNABULA

Adventures
in the
Ascent of Man

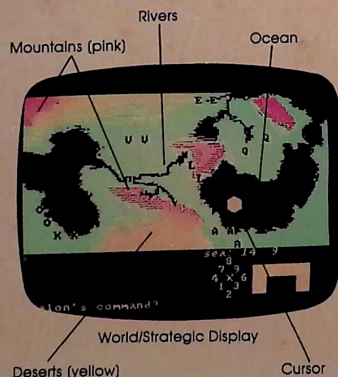
Incunabula is The Avalon Hill Game Company's trademark for its microcomputer game on the rise of civilization.

INCUNABULA: The beginning of time and the dawn of recorded history. You begin with a small tribe facing an unexplored land. You are hunters, but driven to settle and grow; to build cities and grow food; to gather knowledge and develop laws and skills to expand from a simple clan to a complex civilization, ruling over vast stretches of land.

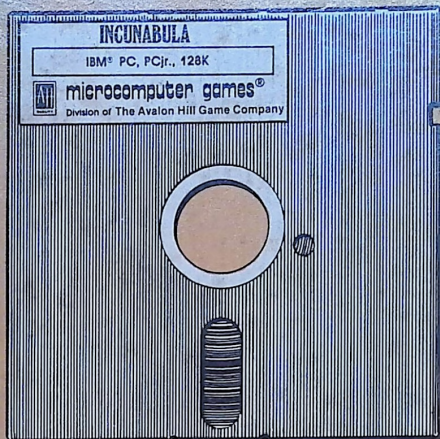
Incunabula dares you to strive for power and glory at the head of a clan determined to tame an unknown land. Up to seven can play, including a computer that can supply players drawn from 16 different personalities! Whether alone, or with a combination of computer and human players, each game promises a different and exciting challenge.



Local Area/Tactical Display



World/Strategic Display



The objective of the game is to acquire enough wealth and knowledge to fulfill your goal. Should your tribe develop into a Theocracy with a divine king and a strong priesthood . . . or become a Utopian society with its class-less system and citizen-armies? An Oligarchy can be racked by civil wars, but grows quickly and has powerful armies. You could become a Khanate, sweeping the lands at the head of your warriors and demanding tribute from the other tribes!

But civilization did not develop from the swords of warriors alone. To reach the goal of your tribe, knowledge must be acquired in the form of arcana. Agriculture must be developed, along with law, philosophy and theology. Medicine will reduce the effects of plague, while pottery will allow you to store food for the bad years.

Civilization also grew from the work of merchants. In **Incunabula**, arcana can be acquired through careful trading. There are over 25 trade goods that must be found, developed and sold to the highest bidder. A series of screens makes the process easy to perform, but the acumen of the bazaars you must supply yourself!

Incunabula allows you to recreate the centuries-old ascent of man in a single evening. Let the winds of history sweep you away to a challenge faced by your ancestors at the dawn of recorded time.

Incunabula, ready to run on your IBM® PC, PCjr. with 128K disk drive, and color graphics board. Comes complete with a detailed rulebook and game diskette.

For 1 to 7 players. Complexity level: 5 (on a scale of 1 [easy] to 10 [hard]).

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